CONSIDERED: /JW/ (02/24/2009)

Docket No. AUS920010473US1 *PATENT*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Beukema et al.**	§	
	§	Group Art Unit: **2151**
Serial No. **09/925,578**	§	
	§	Examiner: **Walsh, John B.**
Filed: **August 9, 2001**	§	
	§	
For: **Apparatus and Method for Implementing Multicast on a System Area Network Channel Adapter**	§	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

35525
PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

REPLY BRIEF (37 C.F.R. 41.41)

This Reply Brief is submitted in response to the Examiner's Answer mailed on July 25, 2007.

No fees are believed to be required to file a Reply Brief. If any fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0447.

RESPONSE TO EXAMINER'S ANSWER

(1) On page 6 of the Examiner's Answer, in the Examiner rebuttal to Argument 1, the Examiner has cited a new section within the cited reference that is alleged to teach that queue pairs (QPs) are associated with a multicast group. Previously, the Examiner had merely established a teaching of ports/nodes being associated with a multicast group. Appellants urge that even assuming arguendo that the cited reference teaches a multicast group being associated with a *single* QP, (1) *how QPs are identified* as per the features of Claim 1 is still not taught by such allegation (receiving the data packet, wherein the data packet includes an identifier of a multicast group, and identifying a *plurality* of queue pairs that are members of the multicast group). The cited reference teaches *ports/nodes being identified*, and not QPs (as claimed), using the information received in a received data packet (Kashyap col. 6, lines 46-48 and 62-65). There is no teaching of "receiving the data packet, wherein the data packet includes an identifier of a multicast group" and "*identifying a plurality of queue pairs* that are members of the multicast group".

(2) On page 7 of the Examiner's Answer, in the Examiner rebuttal to Argument 2, the Examiner has cited a new section within the cited reference that is alleged to teach delivery of the received data packet to each of the identified QPs in that the newly cited passage teaches 'a multicast DLID that *has been configured* for the QP' (emphasis added by Appellants). Appellants urge that even assuming arguendo that this is true, this does not establish a teaching of delivering the data packet to *each of a plurality of the queue pairs* that are members of the multicast group, as the reference explicitly teaches at col. 6, lines 62-65 that received *data packets that specify a multicast ID are sent to ports of the nodes*. There is no teaching of "receiving the data packet, wherein the data packet includes an identifier of a multicast group; *identifying a plurality of queue pairs* that are members of the multicast group; and *delivering the data packet to each of the plurality of queue pairs that are members of the multicast group*".

(3) On page 8 of the Examiner's Answer, in the Examiner rebuttal to Argument 3, the Examiner rebuts Appellants' position that according to Kashyap's teachings all QPs operate *independent* of one another and thus are not grouped or associated according to a multicast address.

Specifically, the Examiner states that there is no context in Appellants' cited passage (Kashyap col. 5, line 67 – col. 6, line 2) to support Appellants' 'QP being independent from multicast addresses' position regarding the teaching of the cited reference. Appellants urge that the cited reference's statement regarding QP independence is unqualified, and thus is all encompassing with respect to independent QP operation (and thus multiple QPs are not grouped according to multicast addresses, as claimed).

(4) On page 8 of the Examiner's Answer, in the Examiner rebuttal to Argument 4, the Examiner takes issue with Appellants' statement that "Claim 1 identifies specific queue pairs that are members of a multi-cast group", with the Examiner stating that Claim 1 does not in fact claim this feature. Appellants note that Claim 1 states "identifying a *plurality* of queue pairs that are members of the multicast group", and since a plurality of queue pairs are identified per the features explicitly recited in Claim 1, certain/specific ones of queue pairs that are members of the multicast group ('a plurality of queue pairs') are in fact identified by such step.

(5) On page 8 of the Examiner's Answer, in the Examiner rebuttal to Argument 5, the Examiner asserts that multicasting, in itself, inherently entails that a data packet is replicated. Appellants urge that even assuming arguendo that this is true, that does not establish a specific teaching of replicating data packets *for each of a plurality of queue pairs that are internal to an end node which both originates and receives a given data packet.* Claim 3 explicitly recites "wherein the data packet is received in a channel adapter of *an end node*, wherein the data packet *originates from the end node*, and wherein delivering the data packet to each of the plurality of queue pairs that are members of the multicast group includes replicating the data packet for *each of the plurality of queue pairs that are internal to the end node*" (emphasis added by Appellants).

(6) On page 10 of the Examiner's Answer, in the Examiner rebuttal to Argument 6, the Examiner has cited a new passage of the cited reference in support of the Group A.3 claim rejection ("wherein identifying the plurality of queue pairs includes determining which queue pairs are associated with a *destination local identifier in the data packet*"), and that in any event this claimed feature is inherent (per the Examiner). Appellants respectfully submit that the reference teaches that a sender specifically sets a *single* QP in a multicast message (col. 9, lines 65-66), and that such

sender (server) also receives a specific QP identified in a reply packet received from a client (col. 9, lines 59-61). Thus, even though there may be an association between a multicast message and a single QP, the reference still describes use of a specific QP identifier in the message/packet exchange to identify a specific QP. There is no teaching of "receiving the data packet, wherein the data packet includes an identifier of a multicast group; *identifying a plurality of queue pairs* that are members of the multicast group; and *delivering the data packet to each of the plurality of queue pairs that are members of the multicast group*".

CONCLUSION

In summary, the generalized multicasting described by Kashyap is with respect to ports/nodes, and not with respect to a plurality of queue pairs (QPs), as claimed. To the extent Kashyap describes a QP association with a multicast identifier, Kashyap describes use of but a single QP being associated with such multicast identifier, and this single QP is specifically identified in both the sending and receiving of a data packet. The cited Kashyap reference does not contemplate use of multicasting with multiple queue pairs in a single data packet, and therefore does not anticipate the pending claims of this application.

In conclusion, Appellants have shown numerous and substantial error in the final rejection of all pending claims in this case, and respectfully requests that the Board reverse such rejection.

/Wayne P. Bailey/
Wayne P. Bailey
Reg. No. 34,289
YEE & ASSOCIATES, P.C.
PO Box 802333
Dallas, TX 75380
(972) 385-8777